



## CANNED GOODS POISONING.

NEW YORK, *April 1st*, 1884.

HON.

Food adulteration being a proper subject of enquiry, and as Congress, and the various States are looking into the matter with a view to protecting the people from successful swindling effort upon the part of the manufacturer and producer, and with a still more commendable object, a protection from the bad effect upon the human system of the noxious and poisonous compounds, that necessarily enter into a combination that forms a successful imitation. I deem it not only proper, but obligatory, to call your attention to the really alarming condition of canned goods as at present packed. Food adulteration in most cases, as compared to the lead poison in canned goods, is as a cooing dove to an enraged lion.

There is nothing that so earnestly and imperatively calls for immediate action upon the part of our law-makers, as some action looking to the protection of the consumer from lead poison, not a human being within the reach of canned goods but is interested; not a human being out of our 50,000,000 population except those interested in the improper, and I trust soon to be unlawful method as at present used, but would sign a petition praying for a safe-guard, that shall be thrown around an article of consumption so universally used, so unexceptionally poisonous as the great, very great majority of

canned goods. Lead upon the human system in any form is certain in its bad effect, and is perhaps, the only poisonous article of commerce not used as medicine, strychnia, belladonna, aconite nuxvomica, arsenic, &c. &c., all perform good, as well as bad offices, but it is left for lead to be the exception, to the good; *lead is not internally administered.*

Some few years ago, lead-pipes as a conduit were in use; water, after remaining in them a short time became so impregnated with poison as to not only cause great suffering and danger, but in some instances death, perhaps the most notable instance being the poisoning of the guests at the National hotel at Washington, at all events lead pipes were discarded, iron substituted, and the bad effect of water drinking as to poison was overcome. The fear of lead in the water pipes caused house-keepers to charge their children and servants not to use water remaining over night in the pipes, but to turn the spiggot and allow the water to run until the supply came from the iron main. If water pure and unadulterated could become impregnated with lead in a few hours to an extent of poison, what can the effect be to goods (in cans) that contains an acid that is continually working upon the lead for weeks, months, and years. If the number of cases of sickness, permanent injury to health, and the deaths that have occurred from eating canned goods were collated and presented as an aggregate, the fact would not only be astounding but appalling not a week passes but we see in the papers cases of can goods poison, an individual an entire family.

Four weeks since the papers announced the poisoning of Wm. Geiger of Penn. and his family of 7 persons from eating canned tomatoes, two of whom died. Three weeks since, a colored man named Moss was poisoned nigh unto

death by eating canned tomatoes, and only last week, as noticed in the Washington papers, a Mr. Richard McNally and wife, of Washington, were poisoned by eating Boston baked beans, a large quantity of lead being found on the inside of the can, are not all the facts of canned goods poisoning alarming? The French Government will not allow goods to be packed in cans soldered on the inside. In France, a test to which inside soldered goods were put, resulted in an order from the Director General of Customs as follows:

#### INSIDE SOLDERED CANS.

In order to enforce the necessity of action on the part of packers to protect the reputation of American canned goods, we quote from the third number of the "Commercial Relations of the United States," issued by the Department of State:

"Consul Frank H. Mason, writting from Basle, Switzerland, under date of October 28, 1880, says: 'In respect to canned and preserved meats, the following suggestions are offered, viz: All these articles are rigidly inspected before they are allowed to be sold. In some cases the salts of lead have been found in the outside layers where the alloy used in soldering the can has come in contact with the meat. The obvious remedy for this would seem to be to use some kind of solder in which lead is not an ingredient.'"

The Secretary of State received in December last the following from Mr. Theo. F. Gardner, being an extract from *Le Soleil*, a French newspaper:

The Director-General of Customs has just sent the following circular to the Chamber of Commerce:

"The attention of the Department of Commerce has been called to the dangers which might arise to consum-



ers from the use of alimentary conserves put up in cans which have been soldered on the *inside*.

The consulting Commissioner of Hygiene, to whom the question has been submitted, is convinced that, as far as the public health is concerned, there are serious objections to permitting the sale of products, which, from contact with solder containing lead, might become the cause of poisoning. The Commissioner has consequently reported that there is reason to forbid makers of cans for alimentary conserves to solder on the *inside* of such cans. The Commissioner of Hygiene has added that if manufacturers insist upon soldering on the inside of the cans they ought to be obliged to use pure tin exclusively.

"This report has been adopted by the Minister of Commerce, and the prefects of the departments have received the necessary instructions.

It has seemed necessary to adopt similar arrangements respecting canned articles coming from other countries, not only from regard to the public health, but also in order to not place French manufacturers at a disadvantage with their foreign competitors; consequently, the Minister Finance has decided, April 2, 1880, that there is reason to exact that cans imported must conform to the regulations in question; that those which do not satisfy the conditions required will be provisionally seized by the service, and notice of such seizure will be immediately sent to the procurer of the republic of the locality.

"In order to permit the French manufacturers to dispose of the stocks of cans on hand, it has been agreed that these regulations should take effect from August, 1, 1881. At that date, also, they will be applied to imported cans.

"The Directors are requested to call attention of the service and of the trade to these regulations.

"Le Conseiller d'Etat, directeur-general.

'AMBAND.'"

Owing to the great number of the crew of the Jeannette in the Artic region, being poisoned by eating canned goods, 100,000 cans of which were thrown into the Artic ocean, the following testimony was given.

[Extract from testimony of Lieutenant Danenhower before the Jeannette court of inquiry.]

In May, 1881, a number of the people became affected with stomach disorders, which were attributed to poisoning. It had been observed that the inside of the tomato cans had turned dark, as though acted upon by acid.

[Extract from testimony of Chief Engineer Melville.]

Lieutenant Chipp was on the sick-list when ship went down. I do not know whether these men (whose names I will give) were on the sick-list, but I know they were being treated for lead-poisoning: Mr. Newcomb; the steward, Charles Long; Ling, and Kuchue, the seaman, and Lauterback, coal-heaver; I think that was all.

In other portions of the testimony in the Jeannette inquiry casual mention is made of the fact that some of the Jeannette's crew suffered with lead-poisoning.

In our Navy Department the Secretary addressed a communication on this subject to the Surgeon-General of that Department. The answer of the latter is as follows:

The bureau is of opinion that cans soldered on the inside, bringing lead in contact with the contents, fur-

nish a source of danger to health. The danger is readily appreciated when it is stated that lead in the proportion of one grain to the imperial gallon of drinking-water has produced severe suffering; and the fractional part of a grain (1.1) to the same quantity of water has proven injurious and even caused paralysis.

PHILIP S. WALES,  
*Surgeon-General, U. S. N.*

The Navy Department, in view of the foregoing, will not purchase hereafter for the naval service tin cans soldered on the inside.

The results of extensive tests of vegetables and fruits put up in cans soldered in the usual way, made by the Boston Institute of Technology, have shown that salts of lead are germinated by the contact, and the fruits, &c., thus become dangerously poisonous.

In view of the facts should not one consider it obligatory upon him to use his endeavors in devising some means to protect an innocent, and much injured public; should not some law be passed protecting the consumer from such risks. Is there any measure before Congress or the Legislatures, fraught with such vital importance to the masses as this lead poison, that inevitably exists in canned goods as at present packed with but a very few exceptions.

What causes the canned good's poison? Why the lead, of course; solder is composed of 66 per cent. lead, and 33 per cent. tin, which in most every instance is fluxed with an acid, (muriatic generally) that coming in contact with the fruit, vegetable, or meat acid, becomes very soluble, and salts of lead, a deadly poison, is at once formed.

Tin plate, so called, of which cans are made, is simply very thin sheet iron that receives a pure tin bath, one



pound of which surfaces 448 superficial feet of sheet iron. There can be no possible danger in using goods contained in iron or tin vessels ; iron or tin will not injure any one ; they are as harmless to health as glass or wood ; it is the lead fluxed with the acid that does the harm ; it is the solder on the inside of the can that does the poisoning, and just so long as cans are soldered on the inside this dangerous element, as a fact, will and must exist

The New York Legislature is taking the initiative, and has a bill before it to prevent the sale of goods that have been packed a year, evidently determining that goods that old are unsafe for food. If the bill should become a law, the object sought will not have been attained, as salts of lead will germinate in 10 days, and its effect upon one is in proportion to ones susceptibility to such poison.

That all are affected, there is not the shadow of a doubt ; some with indigestion, others with disordered stomachs, some with vertigo, palsy, paralysis, blood poison, and many are killed outright.

Many people, the richer class, will not use canned goods because of the lead on the inside, paying the highest, and to the masses, prohibitory price for goods in glass vessels. Canned goods have become a necessity in all climes, and among all classes, and any article so generally distributed, so universally and extensively used, the pack last year amounting to over \$300,000,000.00, and for which the demand has doubled the business every 5 years, should be protected and cared for as to enable anyone to eat of the contents of a can without fear and trepidation as to results. If a system of soldering on the outside, without the use of acid as a flux, were adopted, a person could eat any quantity of canned goods he was capable of eating with perfect immunity from lead poisoning. There is but one plan to pursue to meet the exi-

gencies of the case ; a clause in the national adulteration act, or Legislative enactment, if a law was passed, compelling manufacturers to solder on the outside, and use no acid as a flux, one could eat to his hearts content of the many luxuries that he now does not eat of, uses sparingly, or eats heartily of, with the certainty of poison to a certain extent, mayhaps death. Some few manufacturers are soldering on the outside, the contents of which cans are perfectly safe for food, but the per cent. of these cans made is small as compared to the thousands of millions made, and nothing but a stringent law, as in France, compelling manufacturers to solder on the outside without the use of acid as a flux, will give that protection to the consumer ; they have a right to expect from their representatives, both Congressional and State ; it may be suggested that such legislation properly belongs to the states, such being the case and a State Legislature not acting, what is to become of suffering humanity ? As the end justifies the means, and in the absence of State, we ask for National Legislation. In some of the States great difficulty would be encountered ; Maryland, as an instance, where the pack last year amounted to \$25,000,000.00, and 15,000 people were engaged in the manufacture.

Capital wields a powerful influence, and it is fair to presume that a law compelling outside solder could not be passed.

The public will never get the relief sought by State Legislation ; New York, New Jersey, and Delaware may pass a law ; Maryland does not ; what is to prevent Maryland from flooding these States, or any other States or countries with the poisoned stuff ? National legislation is the only cure, and as Senators or Members regard the welfare of those dearest them, of their constituents, of an outraged and endangered public, so in proportion it is hoped they will act.

S. P. HOLT.



*April 7*

NOTE.—FROM THE WASHINGTON "STAR," SATURDAY, MARCH 8, 1884.

TWO CASES OF CANNED GOODS POISONING.—Miss Tippet, one of the family of Dr. Wm. O'Donnell, of this city, was poisoned Friday from eating canned corn. When the can was opened she observed that the top of the corn was spotted and dark. Upon turning it out the sides and bottom appeared the same. She carefully removed the discolored portion, and cooked the remainder, but ate sparingly of it, as, to use her own language she "had an undefined distrust of it." What little she did eat caused her a severe and alarming illness.—Master Campbell, son of Major Campbell, U. S. A., instructor of artillery at Fortress Monroe, is lying dangerously ill, with but slight hopes of his recovery. He ate of cherry pie made from cherries taken from a tin can. In both cases large quantities of lead were found inside the can.

